



PCT

国際調査報告

(法8条、法施行規則第40、41条)  
[PCT18条、PCT規則43、44]

出願人又は代理人 の書類記号 P 2 3 6 5 5 - P O	今後の手続きについては、国際調査報告の送付通知様式(PCT/ISA/220)及び下記5を参照すること。	
国際出願番号 PCT/J P 0 0 / 0 7 2 2 2	国際出願日 (日.月.年) 1 8 . 1 0 . 0 0	優先日 (日.月.年) 1 9 . 1 0 . 9 9
出願人(氏名又は名称) 松下電器産業株式会社		

国際調査機関が作成したこの国際調査報告を法施行規則第41条(PCT18条)の規定に従い出願人に送付する。  
この写しは国際事務局にも送付される。

この国際調査報告は、全部で 3 ページである。

☐ この調査報告に引用された先行技術文献の写しも添付されている。

1. 国際調査報告の基礎

- a. 言語は、下記に示す場合を除くほか、この国際出願がされたものに基づき国際調査を行った。  
☐ この国際調査機関に提出された国際出願の翻訳文に基づき国際調査を行った。
- b. この国際出願は、ヌクレオチド又はアミノ酸配列を含んでおり、次の配列表に基づき国際調査を行った。  
☐ この国際出願に含まれる書面による配列表  
☐ この国際出願と共に提出されたフレキシブルディスクによる配列表  
☐ 出願後に、この国際調査機関に提出された書面による配列表  
☐ 出願後に、この国際調査機関に提出されたフレキシブルディスクによる配列表  
☐ 出願後に提出した書面による配列表が出願時における国際出願の開示の範囲を超える事項を含まない旨の陳述書の提出があった。  
☐ 書面による配列表に記載した配列とフレキシブルディスクによる配列表に記載した配列が同一である旨の陳述書の提出があった。

2. ☐ 請求の範囲の一部の調査ができない(第I欄参照)。

3. ☐ 発明の単一性が欠如している(第II欄参照)。

4. 発明の名称は ☒ 出願人が提出したものを承認する。  
☐ 次に示すように国際調査機関が作成した。

5. 要約は ☒ 出願人が提出したものを承認する。  
☐ 第III欄に示されているように、法施行規則第47条(PCT規則38.2(b))の規定により国際調査機関が作成した。出願人は、この国際調査報告の発送の日から1カ月以内にこの国際調査機関に意見を提出することができる。

6. 要約書とともに公表される図は、  
第 1 図とする。 ☒ 出願人が示したとおりである。 ☐ なし  
☐ 出願人は図を示さなかった。  
☐ 本図は発明の特徴を一層よく表している。

## A. 発明の属する分野の分類 (国際特許分類 (IPC))

Int. Cl<sup>7</sup> H04N9/07

## B. 調査を行った分野

調査を行った最小限資料 (国際特許分類 (IPC))

Int. Cl<sup>7</sup> H04N9/04-9/11

最小限資料以外の資料で調査を行った分野に含まれるもの

日本国実用新案公報 1922-1996年  
 日本国公開実用新案公報 1971-2001年  
 日本国登録実用新案公報 1994-2001年  
 日本国実用新案登録公報 1996-2001年

国際調査で使用した電子データベース (データベースの名称、調査に使用した用語)

## C. 関連すると認められる文献

引用文献の カテゴリー*	引用文献名 及び一部の箇所が関連するときは、その関連する箇所の表示	関連する 請求の範囲の番号
A	WO, 96/07275, A1 (ソニー株式会社) 7. 3月. 1996 (07. 03. 96) 全文, 全図 & EP, 731616, A1 & JP, 8-508623, A & CN, 113681, A & US, 5748235, A	1-9
A	JP, 10-164602, A (ミノルタ株式会社) 19. 6月. 1998 (19. 06. 98) 全文, 全図 (ファミリーなし)	1-9

☒ C欄の続きにも文献が列挙されている。☐ パテントファミリーに関する別紙を参照。

## \* 引用文献のカテゴリー

「A」 特に関連のある文献ではなく、一般的技術水準を示すもの  
 「E」 国際出願日前の出願または特許であるが、国際出願日以後に公表されたもの  
 「L」 優先権主張に疑義を提起する文献又は他の文献の発行日若しくは他の特別な理由を確立するために引用する文献 (理由を付す)  
 「O」 口頭による開示、使用、展示等に言及する文献  
 「P」 国際出願日前で、かつ優先権の主張の基礎となる出願

の日の後に公表された文献

「T」 国際出願日又は優先日後に公表された文献であって出願と矛盾するものではなく、発明の原理又は理論の理解のために引用するもの  
 「X」 特に関連のある文献であって、当該文献のみで発明の新規性又は進歩性がないと考えられるもの  
 「Y」 特に関連のある文献であって、当該文献と他の1以上の文献との、当業者にとって自明である組合せによって進歩性がないと考えられるもの  
 「&」 同一パテントファミリー文献

国際調査を完了した日

16. 01. 01

国際調査報告の発送日

23.01.01

国際調査機関の名称及びあて先

日本国特許庁 (ISA/JP)  
 郵便番号 100-8915  
 東京都千代田区霞が関三丁目4番3号

特許庁審査官 (権限のある職員)

井上 健一



5P

9373

電話番号 03-3581-1101 内線 3581

## C (続き) 関連すると認められる文献

引用文献の カテゴリー*	引用文献名 及び一部の箇所が関連するときは、その関連する箇所の表示	関連する 請求の範囲の番号
A	JP, 7-59098, A (イースマン・コダック・カンパニー) 3. 3月. 1995 (03. 03. 95) 全文, 全図 & EP, 632663, A2 & US, 5382976, A	1-9
A	JP, 4-88782, A (キヤノン株式会社) 23. 3月. 1992 (23. 03. 92) 全文, 全図 & DE, 69124866, C & EP, 469836, A2 & JP, 4-88783, A & JP, 4-88787, A & US, 5305096, A & US, 5579047, A	1-9
A	JP, 7-99664, A (三洋電機株式会社) 11. 4月. 1995 (11. 04. 95) 全文, 全図 (ファミリーなし)	1-9
P, A	WO, 99/59345, A1 (松下電器産業株式会社) 18. 11月. 1999 (18. 11. 99) 全文, 全図 (ファミリーなし)	1-9

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP00/07222

A. CLASSIFICATION OF SUBJECT MATTER  
Int.Cl.<sup>7</sup> H04N9/07

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl.<sup>7</sup> H04N9/04-9/11

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1922-1996	Toroku Jitsuyo Shinan Koho	1994-2001
Kokai Jitsuyo Shinan Koho	1971-2001	Jitauyo Shinan Toroku Koho	1996-2001

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO, 96/07275, A1 (Sony Corporation), 07 March, 1996 (07.03.96), Full text; all drawings & EP, 731616, A1 & JP, 8-508623, A & CN, 113681, A & US, 5748235, A	1-9
A	JP, 10-164602, A (Minolta Co., Ltd.), 19 June, 1998 (19.06.98), Full text; all drawings (Family: none)	1-9
A	JP, 7-59098, A (Eastman Kodak Company), 03 March, 1995 (03.03.95), Full text; all drawings & EP, 632663, A2 & US, 5382976, A	1-9
A	JP, 4-88782, A (Canon Inc.), 23 March, 1992 (23.03.92), Full text; all drawings & DE, 69124866, C & EP, 469836, A1 & JP, 4-88783, A & JP, 4-88787, A & US, 5305096, A & US, 5579047, A	1-9

☒ Further documents are listed in the continuation of Box C.
 ☐ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier document but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search  
16 January, 2001 (16.01.01)Date of mailing of the international search report  
23 January, 2001 (23.01.01)Name and mailing address of the ISA/  
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP00/07222

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP, 7-99664, A (Sanyo Electric Co., Ltd.), 11 April, 1995 (11.04.95), Full text; all drawings (Family: none)	1-9
PA	WO, 99/59345, A1 (Matsushita Electric Ind. Co., Ltd.), 18 November, 1999 (18.11.99), Full text; all drawings (Family: none)	1-9

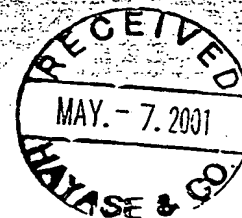
From the INTERNATIONAL BUREAU

PCT

NOTICE INFORMING THE APPLICANT OF THE  
COMMUNICATION OF THE INTERNATIONAL  
APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

To: HAYASE, Kenichi  
Hayase & Co. Patent Attorneys  
8F, Esaka ANA Building  
17-1, Enoki-cho  
Suita-shi  
Osaka 564-0053  
JAPON



Date of mailing (day/month/year) 26 April 2001 (26.04.01)		IMPORTANT NOTICE	
Applicant's or agent's file reference P23655-PO			
International application No. PCT/JP00/07222	International filing date (day/month/year) 18 October 2000 (18.10.00)	Priority date (day/month/year) 19 October 1999 (19.10.99)	
Applicant MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD. et al			

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this Notice:

KR,US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present Notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

CN,ID,SG

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this Notice is a copy of the international application as published by the International Bureau on 26 April 2001 (26.04.01) under No. WO 01/30087

## REMINDER REGARDING CHAPTER II (Article 31(2)(a) and Rule 54.2)

If the applicant wishes to postpone entry into the national phase until 30 months (or later in some Offices) from the priority date, a demand for international preliminary examination must be filed with the competent International Preliminary Examining Authority before the expiration of 19 months from the priority date.

It is the applicant's sole responsibility to monitor the 19-month time limit.

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

## REMINDER REGARDING ENTRY INTO THE NATIONAL PHASE (Article 22 or 39(1))

If the applicant wishes to proceed with the international application in the national phase, he must, within 20 months or 30 months, or later in some Offices, perform the acts referred to therein before each designated or elected Office.

For further important information on the time limits and acts to be performed for entering the national phase, see the Annex to Form PCT/IB/301 (Notification of Receipt of Record Copy) and Volume II of the PCT Applicant's Guide.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No. (41-22) 740.14.35	Authorized officer  J. Zahra  Telephone No. (41-22) 338.83.38
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# PATENT COOPERATION TREATY

PCT

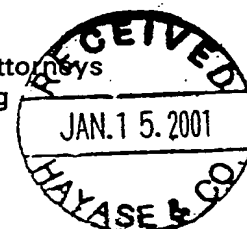
## NOTIFICATION CONCERNING SUBMISSION OR TRANSMITTAL OF PRIORITY DOCUMENT

(PCT Administrative Instructions, Section 411)

From the INTERNATIONAL BUREAU

To:

HAYASE, Kenichi  
Hayase & Co. Patent Attorneys  
8F, Esaka ANA Building  
17-1, Enoki-cho  
Suita-shi  
Osaka 564-0053  
JAPON



Date of mailing (day/month/year) 04 January 2001 (04.01.01)	
Applicant's or agent's file reference P23655-P0	IMPORTANT NOTIFICATION
International application No. PCT/JP00/07222	International filing date (day/month/year) 18 October 2000 (18.10.00)
International publication date (day/month/year) Not yet published	Priority date (day/month/year) 19 October 1999 (19.10.99)
Applicant MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD. et al	

- The applicant is hereby notified of the date of receipt (except where the letters "NR" appear in the right-hand column) by the International Bureau of the priority document(s) relating to the earlier application(s) indicated below. Unless otherwise indicated by an asterisk appearing next to a date of receipt, or by the letters "NR", in the right-hand column, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).
- This updates and replaces any previously issued notification concerning submission or transmittal of priority documents.
- An asterisk(\*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b). In such a case, **the attention of the applicant is directed** to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.
- The letters "NR" appearing in the right-hand column denote a priority document which was not received by the International Bureau or which the applicant did not request the receiving Office to prepare and transmit to the International Bureau, as provided by Rule 17.1(a) or (b), respectively. In such a case, **the attention of the applicant is directed** to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.

<u>Priority date</u>	<u>Priority application No.</u>	<u>Country or regional Office or PCT receiving Office</u>	<u>Date of receipt of priority document</u>
19 Octo 1999 (19.10.99)	11/297136	JP	15 Dece 2000 (15.12.00)

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Facsimile No. (41-22) 740.14.35

Authorized officer

S. Mandallaz

Telephone No. (41-22) 338.83.38

Version with Markings to  
Show Changes Made

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is outputted from the signal processing circuit, and using the filter-transmitted signals corresponding to the peripheral pixels of the pixel placed in the position closest to the pixel to be newly generated, which filter-transmitted signals are outputted from the image pickup elements.

3. A color image pickup device as defined in Claim 1 [or Claim 2], wherein the color separation filters corresponding to the four pixels forming each array pattern of the color separation filters on the image pickup elements are composed of two whole-color-transmission filters (hereinafter referred to as W filters) and two color filters, and the W filters and the color filters are arranged in a checker pattern.

4. A color image pickup device as defined in Claim 3, wherein said color filters are a cyan-transmitting filter and a yellow-transmitting filter.

5. A color image pickup device as defined in Claim 3 [or Claim 4] wherein, when the pixel placed in the position closest to the pixel to be newly generated is a color filter pixel, said resolution conversion circuit obtains the luminance value of the pixel to be newly generated, by calculating (a difference between filter-transmitted signals of W filter pixels adjacent to the color filter pixel)  $\times$  (a factor based on the position of the pixel



to be newly generated)+(the luminance value of the color filter pixel outputted from the signal processing circuit).

6. A color image pickup device as defined in Claim 3 [or Claim 4] wherein, when the pixel placed in the position closest to the pixel to be newly generated is a W filter pixel, said resolution conversion circuit obtains the luminance value of the pixel to be newly generated, by calculating (a difference between filter-transmitted signals of color filter pixels adjacent to the W filter pixel)  $\times$  (a factor based on the position of the pixel to be newly generated)+(the luminance value of the color filter pixel outputted from the signal processing circuit).

7. A color image pickup device as defined in Claim 3 [or Claim 4] wherein, when the pixel placed in the position closest to the pixel to be newly generated is a W filter pixel, said resolution conversion circuit obtains the luminance value of the pixel to be newly generated, by calculating (a difference between filter-transmitted signals of W filter pixels that are placed with a color filter pixel between them)  $\times$  (a factor based on the position of the pixel to be newly generated)+(the luminance value of the color filter pixel outputted from the signal processing circuit).

Claim 1

8. A color image pickup device as defined in <sup>Claim 1</sup>any of Claims 1 to 7, wherein said resolution conversion circuit obtains a color-

difference signal of the pixel to be newly generated, by performing liner interpolation using the color-difference signals obtained by the signal processing circuit.

Claim 1

9. A color image pickup device as defined in any of Claims 1 to 7, wherein said resolution conversion circuit obtains a color-difference signal of the pixel to be newly generated, by using the filter-transmitted signals corresponding to the respective pixels and outputted from the image pickup elements.